Imaging Research Facility

Purpose:

To accommodate the design, fabrication, and testing of a wide variety of imaging systems.

The Imaging Research Facilities involve three different laboratories for the design, fabrication, and testing of imaging systems. The imaging test and measurement laboratory is available for the development and test of analog or digital imaging systems and components such as cameras, optics, recorders, or frame grabbers. Concepts, as well as systems, may be tested by using specialized electronic, recording, and spectral monitoring equipment. Some of the projects supported by the test and measurement laboratory include: Spacelab, Microgravity Glovebox (MGBX), Solid Rocket Booster (SRB), Delta-L, Automatic Rendezvous & Capture (AR&C), Space Flight Holography in a Virtual Apparatus (SHIVA), Lightening Mapper Sensor (LMS), and Evolution of Local Microstructures (ELMS).

The electronics imaging laboratory is used to design, breadboard, and test electronic circuits to build complete imaging systems. Project components developed and/or tested in the electronics laboratory include: Solar X-ray Imager (SXI) camera, MGBX video recording unit, Equiaxed and Transient Dendritic Growth Experiment (EDSE/TDSE) lighting system, Space Coherent Lidar Experiment (SPARCLE) test bed, and Delta-L thermal control system.

The imaging research laboratory was developed as a testbed for imaging system research and development. ESD-resistive workstations, optical benches, and video acquisition equipment accommodate the testing of conventional components or systems as well as innovative designs. Imaging systems requiring precise optical alignment, image processing, and strick lighting control can also be accommodated. Center Director's Discretionary Funds (CDDF) research, Misible Drop in Microgravity (MDMG), and Microgravity Science Glovebox (MSG) are some of the projects supported by this laboratory. These facilities are located in Building 4487.

Point-of-Contact:

Eric L. Corder / ED12
(256) 544-3473
eric.corder@msfc.nasa.gov